

## Analysis of Variance 2024 AIM

Te Aroha College acknowledges that many of the goals, targets and strategies are interrelated in achieving the various objectives of the NELP's.

Strategic Intent	Target	Shift in practice/outcomes																									
Attendance																											
Improve attendance	To increase the number of students attending 90% or more from 40% to 60%. To decrease the number of students who are attending less than 70%	Attendance rates have improved between 3-8%. <ul style="list-style-type: none"><li>Targeted interventions in place, clearer roles and responsibilities, accountabilities.</li><li>Iwi social worker working closely with the school. School funding to support the position (from term three).</li><li>Significant improvement in attendance and engagement for targeted students.</li></ul> <div>Annual attendance rates<table><tr><th>Year Term</th><th>Regular</th><th>Irregular</th><th>Moderate</th><th>Chronic</th></tr><tr><td>2024-1</td><td>47%</td><td>23%</td><td>13%</td><td>17%</td></tr><tr><td>2024-2</td><td>3%</td><td>39%</td><td>24%</td><td>35%</td></tr><tr><td>2024-3</td><td>30%</td><td>31%</td><td>18%</td><td>21%</td></tr><tr><td>2024-4</td><td>28%</td><td>30%</td><td>21%</td><td>21%</td></tr></table></div> Target not achieved - overall attendance rates for regularly attendance is 27% for the year	Year Term	Regular	Irregular	Moderate	Chronic	2024-1	47%	23%	13%	17%	2024-2	3%	39%	24%	35%	2024-3	30%	31%	18%	21%	2024-4	28%	30%	21%	21%
Year Term	Regular	Irregular	Moderate	Chronic																							
2024-1	47%	23%	13%	17%																							
2024-2	3%	39%	24%	35%																							
2024-3	30%	31%	18%	21%																							
2024-4	28%	30%	21%	21%																							
Engagement																											
Improve classroom engagement		Use of engagement reports to monitor student engagement in class Focus of differentiating classroom teacher practice; Must Do   Should Do   Could Do Target students identified at Year 9 and 10, interventions put in place, progress reported through departmental meeting minutes																									
Improve retention rates	Lift retention rates to 75% of students remaining until the 17th birthday.	Retention data is released annually in August. 2022 - 65.8% 2023 - 67.9%																									
Expanding pathways		Introduction of the SSEP at Year 10 Maths New courses developed; Year 12 Construction, Year 12 Media Studies																									
Achievement																											

Improve NCEA results	Reduce disparity in achievement to under 5% L1 - 65%, L2 - 75%, L3 - 70%, UE - 50%	Significant disparity remains between NZE and Māori students. Level 1 28.1%, Level 2 14.6%, Level 3 45.1%, U.E. 25.1%			
		NCEA Results			
			Target	2024 result	Difference
		Level 1	65%	55.1%	-9.9%
		Level 2	75%	65.3%	- 9.7%
		Level 3	70%	52.2%	- 17.8%
		U.E.	50%	43.3%	- 6.7%
Improve Y9 and Y10 outcomes		Better data collection of Year 9 and 10 achievements. Still inconsistencies across subject areas about the quality and frequency of assessment data.			
		See separate Year 9 and 10 progress and achievement report.			

Year 9 and 10 - progress and achievement 2024

The focus is on the core literacy and numeracy subjects - English, Social Science and Mathematics

Recommendations to the 2025 Annual Implementation Plan

- The development of a school wide focus. Literacy plays such an important part in a students ability to access the curriculum. Numeracy is also very literacy based with students having to read problems to apply mathematical concepts to solve the stated problem.
- Use targeted literacy and numeracy strategies and assessments to support students in gaining their literacy and numeracy requirements.
- Continue to build teacher capability using a range of teaching strategies to best students' learning needs.
- Develop teachers' understanding of E-Asttle data to better inform their teacher practice and become more reflective of what works or does not work for the students in front of them.

English

**YEAR 9** Summative end of year Curriculum Level achievement is as follows:

	Well below expected curriculum level			Below expected curriculum level				At or above expected curriculum level				
	2A&-	3B		3P	3A	4B		4P	4A	5B	5P	
All (94)	2	6	8.5%	6	3	31	42.5%	26	8	8	4	49%
Male (61)	2	4	10%	5	3	21	47%	21	3	2		43%
Female (33)		2	6%	1		10	33%	5	5	6	4	61%
NZE (39)		3	7%	3	3	10	41%	11	2	5	2	51%
Māori (35)	1	1	6%	2		18	57%	9	2	2		37%
Asian (14)	1	1	14.5%	1		2	21%	3	3	1	2	64.5%
Pacific (4)		1	25%			1	25%	2				50%
Other (2)								1	1			100%

- 49% of Year 9 finish the year at Curriculum level 4Proficient or above (compared to 80% in 2023)
- 52% finish below expected curriculum level (compared to 20% in 2023)
- 8.5% are well below at curriculum level 3 (compared to 6% in 2023).
- At level 5P, 4% are well above expected curriculum level (compared to 10% in 2023)
- 57% of males are below or well below compared to 39% of females
- 10% of males are well below compared to 6% of females
- 43% of males are at or above compared to 61% of females
- 0% of males are well above compared to 12% of females
- 63% of Māori are below or well below compared to 48% of NZE
- 6% of Māori are well below compared to 8% of NZE
- 37% of Māori are at or above compared to 51% of NZE
- 0% of Māori are well above compared to 5% of NZE

**YEAR 10** Summative end of year OTJ Curriculum Level achievement is as follows:

	Well below expected curriculum level			Below expected curriculum level				At or above expected curriculum level				
	3A&-	4B		4P	4A	5B		5P	5A	6B	6P	
All (95)	6	2	8%	9	5	27	44%	27	10	6	3	48%
Male (48)	2	1	6%	7	5	15	56%	11	4	1	2	33%
Female (47)	4	1	11%	2	0	12	30%	16	6	5	1	59%
NZE (49)	1	1	4%	2	4	17	47%	13	7	3	1	49%
Māori (27)	2	1	11%	2	1	5	29.6%	13	2	1		59%
Asian (15)	2		13%	5		3	53%		1	2	2	33%
Pacific (4)	1		25%			2	50%	1				25%
Other (0)												

- 62% of males are below or well below compared to 41% of females
- 6% of males are well below compared to 11% of females
- 33% of males are at or above compared to 59% of females
- 4% of males are well above compared to 2% of females
- 41% of Māori are below or well below compared to 51% of NZE
- 11% of Māori are well below compared to 4% of NZE
- 59% of Māori are at or above compared to 49% of NZE
- 0% of Māori are well above compared to 2% of NZE

**Social Studies**

Year 9 data

Levels	Total	Male	Female	Māori	European
5B	1%	-	3%	-	3%
4A	16%	5%	31%	10%	21%
4P	17%	18%	14%	13%	15%
4B	11%	18%	-	13%	11%
3A	17%	23%	9%	17%	13%
3P	12%	14%	9%	17%	13%
3B	9%	11%	8%	13%	9%
2A and below	17%	11%	25%	17%	16%

Year 10

Overall achievement- over 5 summative assessments

Levels	Total	Male	Female	Māori	European
6B +	5%	6%	4%	4%	2%
5A	10%	8%	10%	-	12%
5P	16%	16%	15%	20%	18%
5B	22%	16%	27%	20%	29%
4A	21%	20%	21%	12%	15%
4P	12%	16%	10%	15%	10%
4B	7%	10%	5%	15%	7%
3A and below	7%	8%	7%	14%	7%

Year 10 Overall cohort

Value added over two years of Social Studies

Progress in sub-levels	% of cohort	2023 data	Change over time
5	7%	0%	Increase of 7%
4	10%	14%	Decrease of 4%
3	14%	30%	Decrease of 16%
2	28%	14%	Increase of 14%
1	13%	7%	Increase of 6%
No change	10%	5%	Increase of 10%
Negative	5%	1%	Increase of 4%
New students	13%	24%	

Trends/patterns

The data from junior Social Studies shows that almost 60% of students are progressing at least 2 sub-levels from Year 9 to the end of Year 10. This is a positive trend, especially that 7% of the cohort have made a 5 sub-level jump in a year.

Quality and consistency in teaching practices has been one of the major reasons behind this. It has worked very well having Sydney and Angela teaching the junior classes, as their knowledge, pedagogical understanding and collaboration skills have enabled students to feel included and engaged.

Mathematics

Junior School:

Asttle Data has been used in 2024 rather than OTJ's which have been used in previous years. Asttle data is from the Incoming Year 9 Entrance Test, the End of year 9 Asttle Test and the End of year 10 Asttle test. These are all one off tests. Comparisons over time therefore will not be comparing apples to apples.

Year 9:

Achievement:

- Greater % of Europeans working at L4, compared to Maori. (24.4 Disparity)
- Greater % of Males working at L4, compared to Females. (6.4 Disparity)
- Major disparity from 2023 to 2024 in terms of L4 achievement for all groupings. Particularly Maori (-36.6) and Female (-38.9). This fall off can be partially attributed to the 1 off Asttle test being used as summative levels data compared to an OTJ that was used in 2023.

Progression

- Maori and European improvement at Year 9 was comparable.
- Males showed greater improvement at Year 9 than females.

Year 10:

Achievement

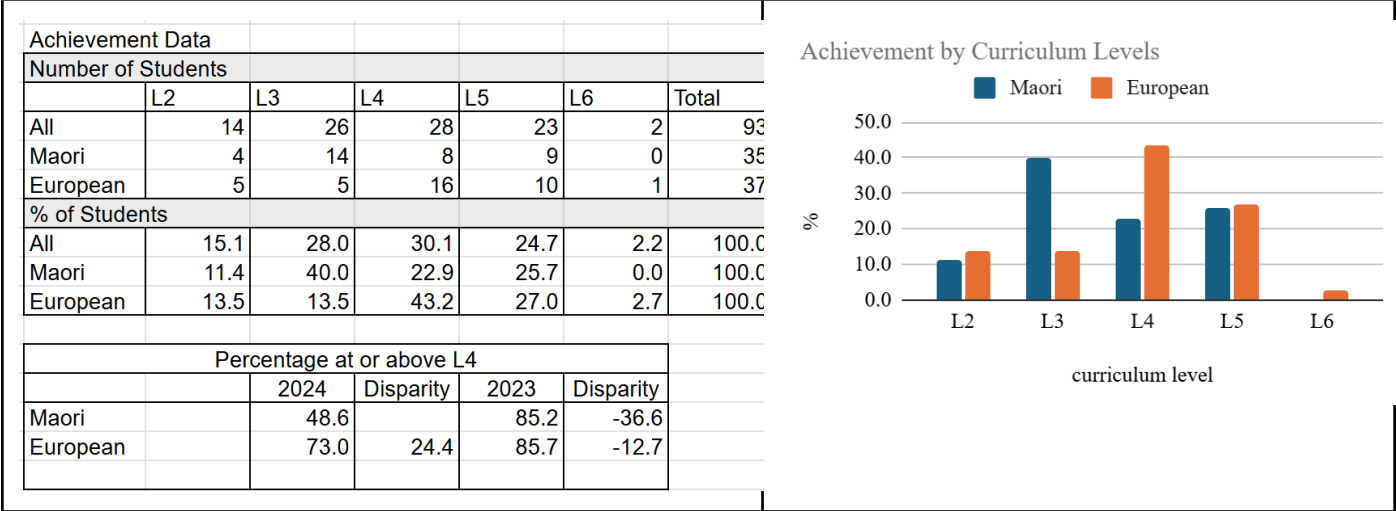
- Greater % of Europeans working at L5, compared to Maori. (16.4 Disparity)
- Greater % of Males working at L5, compared to Females. (6.0 Disparity)

Progression

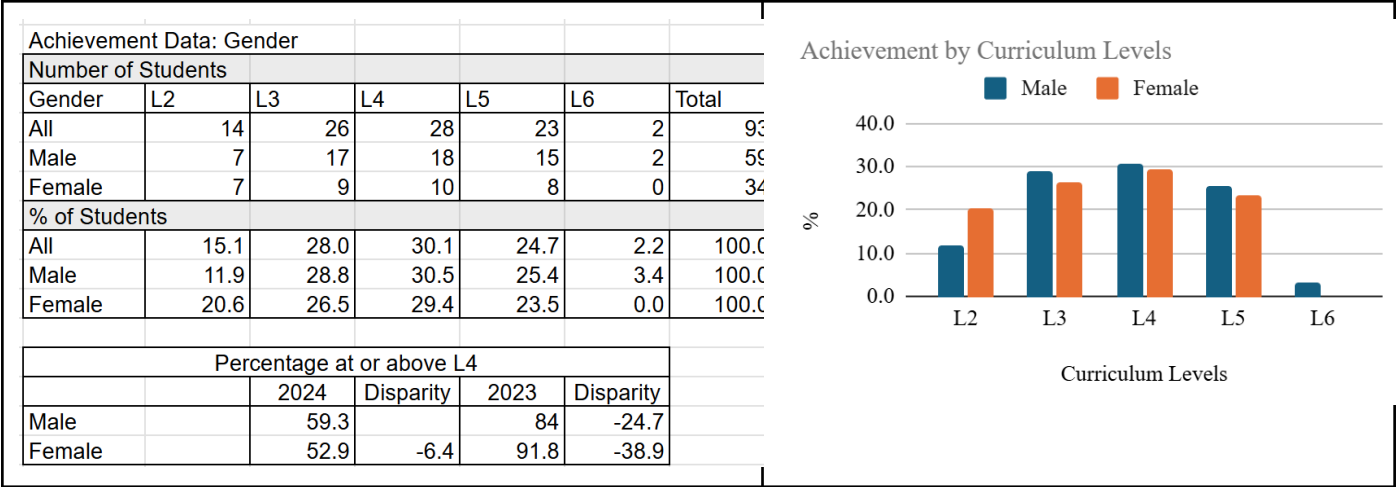
- Europeans showed greater improvement at Year 10 than Maori
- Females showed greater improvement at Year 10 than Males

Year 9

ACHIEVEMENT ANALYSIS
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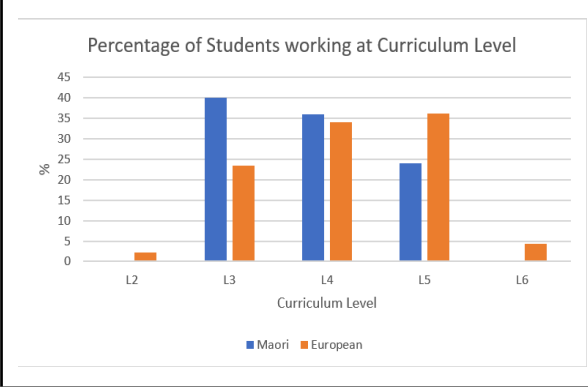
**Ethnicity Analysis:**  
Major disparity between European and Maori. (24.4) when comparing those working at Level 4 at the end of the year.  
Major disparity over time for both Ethnic groups when comparing Level 4 achievement in 2024 to that in 2023. One major contributing factor is that the 2024 data is based purely on a one off Asttle test compared to the 2023 data that was based on an OTJ which was determined by performance throughout the year.



**Gender Analysis**  
Disparity between male and female achievement is evident (6.4). Males outperformed the female. In 2023 the females outperformed the boys.  
The disparity over time for both Male and Female is significant.  
The % of Males performing at Level 4 or better has fallen from 84% in 2023 to 59.3% in 2024, A drop of 24.7.  
The % of females performing at Level 4 or better has fallen from 91.8% in 2023 to 52.9% in 2024. A drop of 38.9.  
Our feeling is that Males may perform better on one off tests such as Asttle compared to females. So basing stats on a one off test has impacted females results on a year to year basis more than males. It will be interesting to see what the 2025 results look like.

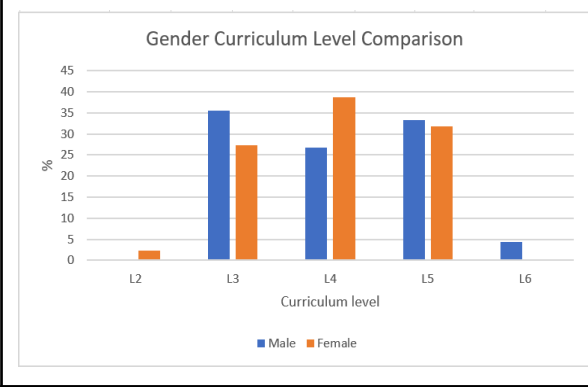
**Year 10**

ACHIEVEMENT DATA						
Number of Students						
	L2	L3	L4	L5	L6	Total
All	1	28	29	29	2	89
Maori	0	10	9	6	0	25
European	1	11	16	17	2	47
% of Students						
All	1.1	31.5	32.6	32.6	2.2	
Maori	0	40	36	24	0	
European	2.1	23.4	34.0	36.2	4.3	
Percentage at or above Level 5						
Maori		24				
European		40.4				
Differential		16.4				



Overall the percentage achieving at or above level 5 is 34.8%. This is low and of a concern  
Disparity is a high 16.4 between Maori (24%) and European (40.4%).  
There is a need to progress students beyond L3, 40% of Maori achieved at L3.  
Again is level generation by a 1 off test a fair reflection of level attainment. We need to look more into this. Are we better off doing shorter end of term Asstle tests. (End of T2,T3 and T4 to generate an average grade)

ACHIEVEMENT DATA						
Number of Students						
	L2	L3	L4	L5	L6	Total
All	1	28	29	29	2	89
Male	0	16	12	15	2	45
Female	1	12	17	14	0	44
% of Students						
All	1.1	31.5	32.6	32.6	2.2	
Male	0	35.6	26.7	33.3	4.4	
Female	2.3	27.3	38.6	31.8	0.0	
Percentage at or above Level 5						
Male		37.8				
Female		31.8				
Differential		6.0				



A gender imbalance at the top level and the bottom level. Boys are performing slightly better at the top but there are also proportionally more boys performing at or below L3 compared to the girls.

## NCEA - 2024 analysis

Overall NCEA results - NZQA table

This is the data table directly from NZQA. I have also included the roll numbers for the corresponding years for your information.

Achievement in NCEA and UE: Te Aroha College													Generated 14-Jan-2025	
PR2 - Enrolment Based Cumulative Overall Results														
7	Te Aroha College				National				Above Average Socioeconomic Barriers (School Equity Index Band)					
Academic Year	Year 11 NCEA L1	Year 12 NCEA L2	Year 13 NCEA L3	Year 13 UE	Year 11 NCEA L1	Year 12 NCEA L2	Year 13 NCEA L3	Year 13 UE	Year 11 NCEA L1	Year 12 NCEA L2	Year 13 NCEA L3	Year 13 UE		
2020	69.3	85.7	75.5	52.8	71.8	80.1	72.1	53.4	74.6	81.2	69.9	43.7		
2021	71.2	74.5	64.1	43.6	69.2	77.9	70.5	51.9	71.5	78.2	67.0	40.8		
2022	59.8	66.7	47.4	36.8	64.9	74.9	68.2	50.3	68.7	74.4	65.4	39.9		

Group	2020	2021	2022	2023	2024
Māori	84	87	83	93	118
Pacific	12	12	13	19	28
Asian	21	23	28	37	51
MELAA	2	2	1	1	0
Other	5	3	4	3	4
European/Pākehā	234	225	232	269	282
International	3	0	0	1	2
Female	164	156	154	185	199
Male	162	160	157	167	191
Another gender/not stated	n/a	n/a	n/a	0	0
Total	326	316	311	352	390

Level 1

	2024	Disparity	2023	Disparity
All	55.4		47.1	
Male	55.6	0.3%	48.6	2.6%
Female	55.3		46.0	
Māori	33		27.6	
NZE	61.4	Significant, 28.1%	53.8	26.2%

Commentary:

- There has been an overall increase in all aspects of NCEA achievement at Level 1 compared to the 2023 results.
- As we know, it was a difficult year for Level 1 students with the introduction of the new Level 1 standards.
- Level 1 is in line with the expected decrease in national Level 1 achievement and comparable with national and equity band results
- Significant disparity remains and increased by 28% between Māori and NZE students
- There is no disparity between male and female achievement levels.

Level 2



	2024	Disparity	2023	Disparity
All	65.3		62.5	
Male	60		64.3	+3.2%
Female	69	+9%	61.1	
Māori	57.1		50	
NZE	71.7	+14.6%	68.2	18.2%

Commentary:

- There has been a significant improvement in the overall results for this cohort of students. As Year 11 students in 2023, they achieved 47.1% compared with 65.3% as Year 12 students in 2024 - an increase of 18.2%.
- There has been a slight reduction in the disparity between Māori and NZE of 3.6%
- Some disparity exists between male and female students - 9%
- While there has been a slight lift in achievement compared to the 2023 cohort, this is still below national and equity index band results

Level 3

	2024	Disparity	2023	Disparity
All	52.2		46.7	
Male	50		50	+7.1%
Female	53.3	+3.3%	42.9	
Māori	18.2		0	
NZE	63.3	+45.1%	47.8	+47.8%

Commentary:

- While there has been an increase in performance compared with the 2023 results, this cohort decreased their achievement by 10%

- University Entrance increased by 7%
- There is improved Māori achievement going from 0% to 18.2%, however significant disparity remains between Māori and NZE
- There is no disparity between male and female students

University Entrance

	2024	Disparity	2023	Disparity
All	37		30	
Male	18.8		31.3	
Female	46.7	Significant, 27.9%	28.6	
Māori	18.2		0	
NZE	43.3	Significant, 25.1%	34.8	Significant, 34.8%

University Entrance (UE) is the minimum requirement to go from school to a New Zealand university.

To be awarded UE, students need:

- NCEA Level 3
  - 14 credits at Level 3 in each of three approved subjects
  - 10 Literacy credits at Level 2 or above, made up of:
    - 5 credits in reading
    - 5 credits in writing.
  - 10 Numeracy credits at Level 1 or above, made up of:
    - co-requisite Level 1 Numeracy unit standard 32406 or Te Pāngarau unit standard 32412, or certain achievement standards.

Literacy Year 11

	TAC 2024	National 2024	TAC 2023	National 2023
All	74.3	76.5	88.5	82.2

Literacy Year 12

	TAC 2024	National 2024	TAC 2023	National 2023
All	91.7	89	90.6	90.8

Literacy Year 13

	TAC 2024	National 2024	TAC 2023	National 2023
All	91.3	92.2	96.7	93.5

Numeracy Year 11

	TAC 2024	National 2024	TAC 2023	National 2023
All	66.2	74.5	85.1	82.3

Numeracy Year 12

	TAC 2024	National 2024	TAC 2023	National 2023
All	91.7	89.1	87.5	90.0

Numeracy Year 13

	TAC 2024	National 2024	TAC 2023	National 2023
All	93.5	92.2	96.7	93.0